



**DEPARTMENT OF THE NAVY
OFFICE OF THE ASSISTANT SECRETARY
RESEARCH, DEVELOPMENT AND ACQUISITION
1000 NAVY PENTAGON
WASHINGTON DC 20350-1000**

MAY 15 2006

MEMORANDUM FOR DISTRIBUTION

SUBJECT: Software Process Improvement Initiative

Successful development and acquisition of software is paramount for acquiring Naval Warfighting and business systems. There are many parallel and related efforts underway that address improvement in the acquisition of software products: mandates such as Public Law 107-314 Section 804 and the Clinger-Cohen Act; initiatives such as Software Assurance and Open Architecture (OA); and the development of best practice models such as the Capability Maturity Model Integration (CMMI) for Acquisition. To consolidate these efforts into a focused initiative, I have formed a steering group composed of my senior engineering professionals and led by the ASN (RD&A) Chief Engineer. This group will evaluate existing policies and implement process improvements to enhance our ability to develop and acquire software without sacrificing the cost, schedule and performance goals of our acquisition programs.

Additionally, five focus teams, led by department software engineering professionals, have been established to achieve our strategic software goals (see attachment):

- Software Acquisition Management (SAM) Focus Team
- Software Systems Engineering (SSE) Focus Team
- Software Development (SWDEV) Techniques Focus Team
- Business Implications Focus Team
- Human Resources Focus Team

To energize the process, I am initiating two projects immediately - software education and software acquisition discipline. These will initially be required for all ACAT I and II level acquisition programs.

The first project is to ensure key government program office personnel have a minimum level of knowledge of software acquisition and engineering management practices. The objective is to quickly establish a solid foundation of trained government software acquisition professionals. To enable this understanding, the following courses will be required for all government Program Managers, Deputy Program Managers, and Technical Directors/Chief Engineers assigned to an ACAT I or II program and must be completed within 18 months:

SUBJECT: Software Process Improvement Initiative

1. DAU course SAM 101 - Basic Software Acquisition Management (24 hour distance learning course)
2. SEI course - Introduction to CMMI (3 days of classroom training)

The second project is to ensure that software development efforts in software intensive system programs are conducted by contractors who have a software process improvement program established that addresses at a minimum:

Software Acquisition Planning
Requirements Development
Management
Project Management and Oversight
Risk Management.

These functional processes must be demonstrated and exercised by the developer in a continuous manner and be equivalent to that articulated by CMMI capability level 3. They will be assessed by ASN RDA Chief Engineer and the senior steering group on a periodic basis. Statements of Work for all applicable future procurements after 1 October, 2006 must address these requirements.

The development, acquisition, and delivery of software are key to the Navy's ability to successfully conduct its Warfighting and Business operations. I need your commitment and I most strongly encourage your support as we address this significant challenge.



Delores M. Etter

Attachment: As Indicated

SUBJECT: Software Process Improvement Initiative

Distribution:

COMNAVSEASYS
COMNAVAIRSYS
COMSPAWARSYS
MARCORSYS
PEO JSF
PEO T
PEO A
PEO W
PEO SHIPS
PEO SUBS
PEO CARRIERS
PEO IWS
PEO EIS
PEO C4I
PEO LMW
PEO SPACE
DRPM SSP
ASN (RD&A) CHENG

Copy to:

DASN ACQ MGT
DASN AIR
DASN C4I/SPACE
DASN IWS
DASN LMW
DASN LOG
DASN M&B
DASN RDT&E
DASN SHIPS
NAVY IPO
DACM
NAVSEA (05, 06)
NAVAIR (4.0)
SPAWAR (05)
COMNAVFACSYS
COMNAVSUPSYS

Software Process Improvement Initiative Teams

Software Acquisition Management (SAM) Focus Team – is chartered to adopt a standard software acquisition life cycle model, develop a tailor able organizational structure with roles and responsibilities, and establish a set of software events and products that will apply over the acquisition life cycle including earned value management system (EVMS) benchmarks for tracking software development progress. This team will also draft the software policy documents with input from the other four teams for submission to the senior steering group.

Software Systems Engineering (SSE) Focus Team – is chartered to integrate software engineering events and products into traditional systems engineering practices. This team will establish compliance methodologies, develop a tailorable set of software metrics, and examine the use of a software systems engineering plan (SSEP) as a means to institutionalize these software practices for presentation at milestone decision points.

Software Development (SWDEV) Techniques Focus Team – is chartered to research and evaluate current and emerging software development methodologies and their supporting standards, to understand their positive and negative attributes, and determine how they could be applied to enhance our software development and acquisition activities. This team will interface with FFRDC's, government labs, academia, and industrial communities in searching out these potentially innovative methodologies.

Business Implications Focus Team – is chartered to examine our business, acquisition, and contracting strategies and practices to ensure the Navy is a “smart buyer” of software products whether they are “off the shelf” purchases or sponsored developments. This should include a fundamental understanding of the implications of emergent software development techniques upon our internal practices and the potential ramifications upon our industrial base. This group will also be expected to develop standardized contract language for the software procurement and development efforts.

Human Resources Focus Team – is chartered to refine the required skills and capabilities needed by government software acquisition and engineering professionals, and to identify a required set training courses tailored to the respective roles and responsibilities of these professionals.